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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,793	05/04/2001	Shyh-Mei F. Ho	SVL920010041US1	1989

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EXAMINER

PRICE, NATHAN E

ART UNIT	PAPER NUMBER
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2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/849,793	Applicant(s) HO ET AL.	
	Examiner Nathan Price	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. This Office Action is in response to communications received 03 January 2007. Claims 1, 2 and 4-12 are pending. Previous objections and rejections not included in this Office Action have been withdrawn.

Response to Arguments

2. Applicant's arguments filed 03 January 2007 have been fully considered but they are not persuasive.

Applicant's amendments to claims 5 and 8 fail to overcome rejections under 35 U.S.C. 101 because the system claims appear to recite elements as part of the system that can be implemented in software alone.

Applicant argues that Ben-Shachar does not teach converting the request from the first language to a form for the mapping support language on the server. However, Ben-Shachar teaches translating "the application requests into formats of the database" (col. 5 lines 9 - 10). The requests are translated so that the database can understand them. Since the database receives requests and sends responses, it functions as a server (col. 5 lines 9 - 10, 13 - 14). Examiner has not relied upon Ben-Shachar to teach a mapping support language.

Applicant argues that Flanagan does not teach or suggest a mapping support language and combining Flanagan with Ben-Shachar would not produce the claimed invention. Examiner respectfully disagrees. Flanagan provides Basic Mapping Support map as an example of a host transaction map (col. 10 line 11).

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This can be imported from the host (Fig. 7 step 126). Therefore, Flanagan teaches importing a BMS map file from a host in order to create a host transaction (Fig. 7 step 126). The transaction map is used to create the host transaction, which is sent to the host (col. 2 lines 21 - 24). This at least implies that the host can be using a mapping support language. The transaction map is used to translate the transaction, which corresponds to translating application requests being sent to a database taught by Ben-Shachar (col. 5 lines 7 -12).

Applicant also argues that the combination of Ben-Shachar and Flanagan fail to specifically teach a map, a map set and a map field. However, Ben-Shachar teaches a map (Fig. 10 shows MAPPING RECORD 1030.1 being mapped to SELF-DESCRIBING RECORD 1020), a map set (Fig. 10 shows MAPPING PACKAGE 1010 which provides a set of maps, specifically 1030.1 mapped to 1020 and 1030.2 mapped to 1020) and a map field (Fig. 10 shows fields, including MAPPING FIELD 1040.1). A description of Fig. 10 is given in col. 9 lines 9 - 22.

See the current rejections for further explanation.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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3. Claims 5 - 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 5 - 10 appear to recite systems that can be implemented in software alone. The language of the claims raises the question of whether the claims include hardware required for the software to realize its functionality. Therefore, the claims are software, per se, and are rejected as being directed towards non-statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 - 2 and 4 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Shachar (US 5,761,656) in view of Flanagan et al. (US 6,243,737 B1).

As to claim 1, Ben-Shachar discloses a method of processing an application request on an end user application and an application server (abstract; col. 5 lines 2 -16) comprising:

a) initiating the application request on the end user application in a first language with a first application program (col. 5 lines 6 - 10);

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b) transmitting the application request to the server and converting the application request from the first language of the first end user application to a form for the language running on the application server (col. 5 lines 3 - 12), wherein the end user application is connected to the application server through a connector (col. 5 lines 2 - 16, execution manager 150);

c) processing said application request on the application server (col. 5 lines 6 - 15);

d) transmitting a response to the application request from the application server to the end user application, and converting the response to the application request from the language running on the application server to the first language of the first end user application (col. 5 lines 12- 17); and

e) wherein the connector is configured to (i) convert the application request from the first language of the first end user application as a source language to the language running on the application server as a target language (col. 5 lines 6 - 12), and (ii) convert a response to the application request from the language running on the application server as a source language to the first language of the first end user application as a target language (col. 5 lines 13 - 16), each comprise:

1) invoking connector metamodels of respective source language and target language ("mapping file" col. 5 lines 6 - 15);

2) populating the connector metamodels with metamodel data of each of the respective source language and target language, the metamodel

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data of the target language including a map, a mapset, and a mapfield (Figures 3 and 10; col. 5 lines 29 - 48; col. 9 lines 10 - 22); and

3) converting the source language to the target language (col. 9 lines 10- 22).

Ben-Shachar fails to specifically disclose a mapping support language and a web server. However, Flanagan et al. disclose a mapping support language (col. 10 lines 1 - 16). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine these references because both references focus on providing server processing to clients by mapping requests between formats of the client and server. With respect to the web server, although it is not specifically stated that the connectors (execution manager in Ben-Shachar and transaction server in Flanagan) are web servers, it is at least implied by the references because Ben-Shachar states that the execution manager can serve an HTML application (col. 2 lines 55 - 59) and Flanagan states that the client can be a web-based client (col. 3 lines 48 -51).

As to claim 2, the method of claim 1 is rejected for the reasons above. Ben-Shachar discloses that the end user application is a web browser (col. 5 lines 29 - 33).

As to claim 4, the method of claim 1 is rejected for the reasons above. Ben-Shachar also discloses that the metamodel comprises invocation metamodel data, application domain interface metamodel data, transaction message metamodel data, and type descriptor metamodel data (col. 4 lines 30 - 36; col. 5 lines 2 - 12, 39 - 50).

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As to claims 5 - 7, see the rejections of claims 1 and 2.

As to claims 8 - 10, see the rejections of claims 1 and 2.

As to claim 11, Ben-Shachar discloses a program product comprising a computer-readable storage medium having invocation metamodel data, application domain interface metamodel data, language metamodel data, and mapping metamodel data (col. 4 lines 30 - 36; col. 5 lines 39 - 50), said mapping metamodel data including a map, a mapset, and a mapfield (Figures 3 and 10; col. 5 lines 29 - 48; col. 9 lines 10 - 22); and computer instructions for building a metamodel data repository of source and target language metamodel data (col. 2 lines 32 - 43).

Ben-Shachar fails to specifically disclose a mapping support language. However, Flanagan et al. disclose a mapping support language (col. 10 lines 1 - 16). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine these references because both references focus on providing server processing to clients. See the rejections of claims 1 and 4 for further explanation.

As to claim 12, the program product of claim 11 is rejected for the reasons above. Ben-Shachar, as modified above to include mapping support languages, discloses that the metamodel data in the repository comprises invocation metamodel data, application domain interface metamodel data, mapping support language metamodel data, and type descriptor metamodel data (col. 4 lines 30 - 36; col. 5 lines 39 - 50).

Conclusion

5. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 6:30am - 3:00pm, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP


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